SEQUENCE LISTING <110> Hilbush, Brian S Hasel, Karl W Sutcliffe, J. Gregor 5 Chang, Hwai Wen Callahan, Marie A Quan, Jeanette <120> Simplified Method For Indexing And Determining The Relative 10 Concentration Of Expressed Messenger RNAs <130> 98-430 <140> 15 <141> 2001-02-01 <150> US 09/186,869 <151> 1998-11-04 <150> PCT/US99/23655 <151> 1999-10-14 20 <160> 41 41 <170> PatentIn Ver. 2.0 `~ j ile. <210> 1 **11** 25 <211> 79 <212> DNA ٦, <213> Artificial Sequence les É <220> 1 <221> misc_feature Ξ 30 <222> 1 <223> Description of Artificial Sequence: synthetic primer (cDNA anchor primer) wherein base 1 is a biotinylated adenosine residue. **[**] <220> <221> misc_feature = h **35** <222> 77 <223> Description of Artificial Sequence: synthetic primer (cDNA anchor - L primer) wherein v can represent A, C, or G. <220> <221> misc_feature 40 <222> 78 <223> Description of Artificial Sequence: synthetic primer (cDNA anchor primer) n can represent A, C, G, or T. <220> <221> misc_feature 45 <222> 79 <223> Description of Artificial Sequence: synthetic primer (cDNA anchor primer) n can represent A, C, G, or T. <400> 1 atgaattete tagagattge taceteagte tgagetecae egeggtagta etcaetgett 60 79 tttttttt tttttrnn 50 <210> 2

<211> 68

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<212> DNA
       <213> Artificial Sequence
       <221> misc_feature
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       <222> 1
       <223> Description of Artificial Sequence: synthetic primer (cDNA anchor
       primer) wherein base 1 is a biotinylated adenosine residue.
       <220>
       <221> misc_feature
  10
       <222> 66
       <223> Description of Artificial Sequence: synthetic primer (cDNA anchor
       primer) wherein v can represent A, C, or G.
       <220>
       <221> misc_feature
  15
       <222> 67
       <223> Description of Artificial Sequence: synthetic primer (cDNA anchor
       primer) n can represent A, C, G, or T.
       <220>
       <221> misc feature
  20
       <222> 68
       <223> Description of Artificial Sequence: synthetic primer (cDNA anchor
       primer) n can represent A, C, G, or T.
       atgaattctc tagagtctga gctccaccgc ggtagtactc actgcagttt tttttttt
                                                                              60
  25
                                                                              68
       tttttvnn
       <210> 3
       <211> 79
· 30
       <212> DNA
       <213> Artificial Sequence
       <220>
       <221> misc_feature
        <222> 1
<223> Description of Artificial Sequence: synthetic primer (cDNA anchor
  35
        primer) wherein base 1 is a biotinylated guanosine residue.
⊨k
        <220>
        <221> misc_feature
        <222> 75
        <223> Description of Artificial Sequence: synthetic primer (cDNA anchor
   40
        primer) wherein v can represent A, C, or G.
        <220>
        <221> misc_feature
        <222> 76
        <223> Description of Artificial Sequence: synthetic primer (cDNA anchor
   45
        primer) n can represent A, C, G, or T.
        <220>
        <221> misc_feature
        <222> 77
        <223> Description of Artificial Sequence: synthetic primer (cDNA anchor
   50
        primer) n can represent A, C, G, or T.
        <400> 3
        gaattcaact ggaagcggcc gcaggaagag ctccaccgcg gtagtactca ctgcagtttt
                                                                               60
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77
       tttttttt ttttvnn
       <210> 4
       <211> 48
   5
       <212> DNA
       <213> Artificial Sequence
       <220>
       <221> misc_feature
       <222> 1
      <223> Description of Artificial Sequence: synthetic primer (cDNA anchor
       primer) wherein base 1 is a biotinylated guanosine residue.
       <220>
       <221> misc_feature
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       <223> Description of Artificial Sequence: synthetic primer (cDNA anchor
  15
       primer) wherein v can represent A, C, or G.
       <220>
       <221> misc feature
       <222> 47
       <223> Description of Artificial Sequence: synthetic primer (cDNA anchor
  20
       primer) n can represent A, C, G, or T.
       <220>
       <221> misc_feature
       <222> 48
       <223> Description of Artificial Sequence: synthetic primer (cDNA anchor
       primer) n can represent A, C, G, or T.
        <400> 4
       gaattcaact ggaagcggcc gcaggaattt tttttttt tttttvnn
                                                                              48
30
        <210> 5
        <211> 15
        <212> DNA
        <213> Artificial Sequence
        <223> Description of Artificial Sequence: 3' PCR primer
35
        <400> 5
                                                                             15
        gagctccacc gcggt
- is
   40
        <210> 6
        <211> 16
        <212> DNA
        <213> Artificial Sequence
        <223> Description of Artificial Sequence: 3' PCR primer
   45
        <400> 6
                                                                            16
        gagctcgttt tcccag
        <210> 7
   50
        <211> 65
        <212> DNA
         <213> Artificial Sequence
         <220>
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<223> Description of Artificial Sequence: one strand of double stranded
       adapter
       <400> 7
       atgaattcgg taccaattaa ccctcactaa agggacagct tatcatcgct cgagctcgac
                                                                             60
   5
                                                                             65
       ggtat
       <210> 8
       <211> 67
  10
       <212> DNA
       <213> Artificial Sequence
       <220>
       <223> Description of Artificial Sequence: other strand of double stranded
       adapter
  15
       <400> 8
       cgataccgtc gagctcgagc gatgataagc tgtcccttta gtgagggtta attggtaccg
                                                                             60
                                                                             67
       aattcat
  20
       <210> 9
       <211> 52
       <212> DNA
       <213> Artificial Sequence
-
  25
        <220>
        <221> misc_feature
        <222> 1
        <223> Description of Artificial Sequence: O1 (antisense strand); double
        stranded adapter wherein base 1 is a phosphorylated cytosine residue.
  30
1,1
        <400> 9
        cgataccgtc gacctcgagg tccctttagt gagggttaat tggtaccgaa tt
                                                                              52
35
        <210> 10
= h
        <211> 50
        <212> DNA
        <213> Artificial Sequence
        <223> Description of Artificial Sequence: O2 (sense strand); double stranded
   40
        adapter
        <400> 10
                                                                              50
        aattcggtac caattaaccc tcactaaagg gacctcgagg tcgacggtat
   45
        <210> 11
        <211> 56
        <212> DNA
        <213> Artificial Sequence
   50
        <220>
        <221> misc_feature
        <222> 1
        <223> Description of Artificial Sequence: One strand of double stranded
        adapter wherein base 1 is a phosphorylated guanosine residue.
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<400> 11
       gatcctcacc acagagette gaggteeett tagtgagggt taattggtac egaatt
                                                                             56
   5
       <210> 12
       <211> 52
       <212> DNA
       <213> Artificial Sequence
  10
       <223> Description of Artificial Sequence: One strand of double stranded
       adapter
       <400> 12
       aattcggtac caattaaccc tcactaaagg gacctcgaag ctctgtggtg ag
                                                                             52
  15
        <210> 13
        <211> 52
  20
        <212> DNA
        <213> Artificial Sequence
        <220>
        <221> misc_feature
4
        <222> 1
        <223> Description of Artificial Sequence: One strand of a double stranded
25
        adapter wherein base 1 is a phosphorylated cytosine residue.
1,50
1
        <400> 13
1
        ctcaccacag agcttcgagg tccctttagt gagggttaat tggtaccgaa tt
                                                                                52
pa la
  30
<210> 14
        <211> 56
7,
        <212> DNA
35
        <213> Artificial Sequence
us h
        <223> Description of Artificial Sequence: One strand of double stranded
adapter
⇒ h
   40
        <400> 14
        aattcggtac caattaaccc tcactaaagg gacctcgaag ctctgtggtg agcatg
                                                                               56
   45
        <210> 15
         <211> 21
         <212> DNA
         <213> Artificial Sequence
        <223> Description of Artificial Sequence: Reverse transcriptase (RT) MN_{\rm 0}
   50
         primer
         <400> 15
                                                                                  21
         cagtctgagc tccaccgcgg t
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<210> 16
       <211> 21
       <212> DNA
       <213> Artificial Sequence
   5
       <220>
       <221> misc_feature
       <223> Description of Artificial Sequence: synthetic primer (5' PCR N_1 primer)
       each n can represent A, C, G, or T.
  10
       <400> 16
                                                                           21
       ctcgagctcg acggtatcgg n
       <210> 17
       <211> 22
  15
       <212> DNA
       <213> Artificial Sequence
       <220>
       <221> misc_feature
  20
       <223> Description of Artificial Sequence: synthetic primer (5' PCR N_1 primer)
       each n can represent A, C, G, or T.
ij.
        <400> 17
                                                                           22
25
        cctcgaggtc gacggtatcg gn
ile.
U
        <210> 18
        <211> 16
٩.
        <212> DNA
= k
30
        <213> Artificial Sequence
        <220>
        <221> misc feature
        <222> 13, 14, 15, 16
        <223> Description of Artificial Sequence: synthetic primer (5' PCR N_4 primer)
7
        each n can represent A, C, G, or T.
35
j≔ k
        <400> 18
=1
                                                                            16
        cgacggtatc ggnnnn
40
        <210> 19
         <211> 19
         <212> DNA
         <213> Artificial Sequence
         <220>
         <221> misc_feature
   45
         <222> 19
         <223> Description of Artificial Sequence: synthetic primer (5' PCR N_1 primer)
         each n can represent A, C, G, or T.
    50
         <400> 19
                                                                             19
         agctctgtgg tgaggatcn
         <210> 20
```

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<211> 20
       <212> DNA
       <213> Artificial Sequence
       <220>
   5
       <221> misc feature
       <222> 17, 18, 19, 20
       <223> Description of Artificial Sequence: synthetic primer (5' PCR N4 primer)
       each n can represent A, C, G, or T.
      <400> 20
  10
                                                                               20
       ctctgtggtg aggatcnnnn
       <210> 21
       <211> 19
  15
       <212> DNA
       <213> Artificial Sequence
       <220>
       <221> misc_feature
       <222> 19
       <223> Description of Artificial Sequence: synthetic primer (5' PCR N_1 primer)
  20
       each n can represent A, C, G, or T.
        <400> 21
                                                                          19
       agctctgtgg tgagcatgn
25
        <210> 22
        <211> 20
        <212> DNA
<213> Artificial Sequence
  30
        <220>
-
        <221> misc feature
        <222> 17, 18, 19, 20
        <223> Description of Artificial Sequence: synthetic primer (5' PCR N_4 primer)
        each n can represent A, C, G, or T.
1
35
        <400> 22
es h
                                                                                20
        ctctgtggtg agcatgnnnn
= i
        <210> 23
   40
         <211> 22
         <212> DNA
         <213> Artificial Sequence
         <220>
         <221> misc_feature
   45
         <223> Description of Artificial Sequence: synthetic primer (5' PCR N_1 primer)
         <222> 22
         each n can represent A, C, G, or T.
    50
         <400> 23
                                                                              22
         cctcgaggtc gacggtatcg an
         <210> 24
         <211> 23
```

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<212> DNA
       <213> Artificial Sequence
       <220>
       <221> misc feature
      <222> 20, 21, 22, 23
       <223> Description of Artificial Sequence: synthetic primer (5' PCR N_4 primer)
       each n can represent A, C, G, or T.
       <400> 24
                                                                                   23
       tcgaggtcga cggtatcgan nnn
  10
       <210> 25
       <211> 30
  15
       <212> DNA
       <213> Artificial Sequence
       <220>
       <221>
       <223> Description of Artificial Sequence: synthetic primer (NF-\kappaB extended
  20
       primer)
       <400> 25
                                                                            30
       gatcgaatcc ggcccgcctg aatcattctc
  25
       <210> 26
        <211> 12
        <212> DNA
        <213> Artificial Sequence
        <223> Description of Artificial Sequence: first stuffer segment of
30
              anchor primer
        <400> 26
                                                                             12
        agtactcact gc
   35
te le
        <210> 27
        <211> 14
        <212> DNA
        <213> Artificial Sequence
   40
        <223> Description of Artificial Sequence: first stuffer segment of
               anchor primer
   45
        <400> 27
                                                                             14
        agtactcact gcag
         <210> 28
    50
         <211> 16
         <212> DNA
         <213> Artificial Sequence
         <220>
         <223> Description of Artificial Sequence: second stuffer segment of
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anchor primer
       <400> 28
                                                                            16
       gattgctacc tcagtct
   5
       <210> 29
       <211> 16
       <212> DNA
       <213> Artificial Sequence
  10
       <220>
       <221> misc_feature
       <222> 16
       <223> Description of Artificial Sequence: synthetic primer (5' PCR N_4 primer)
       each n can represent A, C, G, or T.
  15
        <400> 29
                                                                            16
        gctcgacggt atcggn
        <210> 30
   20
        <211> 16
        <212> DNA
        <213> Artificial Sequence
        <220>
        <221> misc_feature
25
        <222> 15, 16
        <223> Description of Artificial Sequence: synthetic primer (5' PCR N_2 primer)
4
each n can represent A, C, G, or T.
٦,
        <400> 30
32 h
                                                                              16
· 30
        ctcgacggta tcggnn
1
        <210> 31
7,
        <211> 16
        <212> DNA
   35
22 h
        <213> Artificial Sequence
        <220>
        <221> misc_feature
        <222> 14, 15, 16
        <223> Description of Artificial Sequence: synthetic primer (5' PCR N_3 primer)
   40
        each n can represent A, C, G, or T.
         <400> 31
                                                                              16
   45
         tcgacggtat cggnnn
         <210> 32
         <211> 16
    50
         <212> DNA
         <213> Artificial Sequence
         <220>
         <221> misc_feature
         <222> 12, 13, 14, 15, 16
```

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<223> Description of Artificial Sequence: synthetic primer (5' PCR N_5 primer)
       each n can represent A, C, G, or T.
       <400> 32
                                                                             16
   5
       gacggtatcg gnnnnn
       <210> 33
       <211> 16
  10
       <212> DNA
       <213> Artificial Sequence
       <220>
       <221> misc_feature
       <222> 11, 12, 13, 14, 15, 16
       <223> Description of Artificial Sequence: synthetic primer (5' PCR N<sub>6</sub> primer)
  15
       each n can represent A, C, G, or T.
        <400> 33
                                                                             16
        acggtatcgg nnnnnn
  20
        <210> 34
        <211> 16
        <212> DNA
25
        <213> Artificial Sequence
        <220>
        <221> misc_feature
        <222> 16
        <223> Description of Artificial Sequence: synthetic primer (5' PCR N_4 primer)
30
        each n can represent A, C, G, or T.
        <400> 34
                                                                            16
        ggtcgacggt atcggn
35
æ la
        <210> 35
        <211> 16
        <212> DNA
= 1
        <213> Artificial Sequence
   40
        <220>
        <221>
         <222>
        <223> Description of Artificial Sequence: synthetic primer (5' RT primer).
   45
         <400> 35
                                                                            16
         aggtcgacgg tatcgg
         <210> 36
    50
         <211> 59
         <212> DNA
         <213> Artificial Sequence
         <220>
         <221>
```

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<222>
       <223> Description of Artificial Sequence: synthetic primer (5' ds primer).
       toccagtoac gaogttgtaa aacgaoggot catatgaatt aggtgaocga cggtatogg 59
   5
       <210> 37
       <211> 46
       <212> DNA
       <213> Artificial Sequence
  10
       <220>
       <221>
       <222>
       <223> Description of Artificial Sequence: synthetic primer (3' ds primer).
  15
       <400> 37
                                                                          46
       cagoggataa caatttcaca cagggagete cacegeggtg geggee
        <210> 38
  20
        <211> 23
        <212> DNA
        <213> Artificial Sequence
<220>
J)
        <221>
  25
        <222>
        <223> Description of Artificial Sequence: synthetic primer (5' sequencing
4
primer).
= h
        <400> 38
                                                                          23
30
       cccagtcacg acgttgtaaa acg
# G
        <210> 39
        <211> 19
<212> DNA
        <213> Artificial Sequence
   35
        <220>
        <221> misc feature
= =
        <222> 19
        <223> Description of Artificial Sequence: synthetic primer (3' sequencing
        primer) wherein v can represent A, C, or G.
   40
                                                                          19
        <400> ttttttttt tttttt
   45
        <210> 40
        <211> 25
        <212> DNA
        <213> Artificial Sequence
        <220>
   50
        <221>
        <223> Description of Artificial Sequence: synthetic primer (3' sequencing
         primer).
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